Abstract of the Disclosure

An arrangement for generating a stereoscopic image of an object for viewing by an observer includes an imaging optic for imaging the object and defining an imaging beam path as well as an entry pupil and an exit pupil. Illuminating optics illuminate the object by providing an imaging beam coming from the object and passing through the imaging optic and along the imaging beam path. The imaging beam is sectioned in the imaging beam path into two component beams at one of the following locations: in the exit pupil, near the exit pupil or at a position along the imaging beam path which is optically conjugated to the exit pupil, thereby forming stereoscopic sectioned images. The stereoscopic section images are allocated in a clocked manner to the left and the right eyes of the observer. The invention is also directed to a method of generating a stereoscopic image of the object.